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For those interested in Homemaking, Institution Management, and Educational Work in Home Economics

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CONTENTS

GRACE AT TABLE . . . . . *Frontispiece*
A STUDY OF THE COST OF LIVING OF WORKING CLASS FAMILIES IN ROXBURY, MASS. . . . . *Sara Henry Stiles* 147
THE HOME ECONOMICS TEACHER IN THE RURAL SCHOOL . . . . . *Helen Graham* 157
HOUSEHOLD PHYSICS AND PRACTICE COTTAGE WORK . . . . . *B. L. Steele* 162
HOW MUCH FOOD DOES IT TAKE TO SUPPLY US WITH THE CALCIUM WE NEED? *Minna C. Denton* 168
CONSERVING WOMAN POWER IN WAR TIME . . . . . *Mary Alden Hopkins* 171
THE PROFESSIONAL SERVICES OF HELEN KINNE 174
FOR THE HOMEMAKER
A LESSON IN ECONOMICAL BUYING . . . . . *Greta Gray* 177
HOUSEHOLD THRIFT . . . . . *C. F. Stoddard* 181
THE WHEAT FLOUR ALLOWANCE 183
UNTIL THE NEXT HARVEST 185
EDITORIAL 187
BOOKS AND LITERATURE 189
BIBLIOGRAPHY OF HOME ECONOMICS 191
NEWS FROM THE FIELD 193

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GRACE AT TABLE

1918

Here we gather, dear All-Father,
Round Thy table to be fed.
'Tis Thy gift,—our daily bread.

As we gather to be fed
Nations plead for daily bread,—
Fighting son and anguished mother,
Orphaned children,—all together
Pray to Thee for daily bread.
At Thy common table, Father,
Ask we all for daily bread.

God, All-Father, hear our prayer!
Move our hearts and minds to share
With Thy children at Thy table
This Thy gift of daily bread,—
Sacred gift of daily bread!

Lest they perish, swift and eager
Share we now our daily bread.
Give through us, O great All-Father,
To Thy children, daily bread!

SARAH LOUISE ARNOLD.

THE

Journal of Home Economics

VOL. X APRIL, 1918 No. 4

A STUDY OF THE COST OF LIVING OF WORKING CLASS FAMILIES IN ROXBURY, MASS.

SARA HENRY STITES

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Approximately three quarters of the families of the United States belong to the so called "working" or "wage earning" class. Certainly in view of their numbers, the maintenance of a decent standard of living by this class of families is a matter of the greatest importance to the welfare of the country. Especially at this time, when the United States is engaged in the most formidable war of history, it is the part of wisdom to see to it that all members of the community are kept in the highest possible state of efficiency. This year, more than ever before, it is true that underfed, poorly clothed, inadequately sheltered, and mentally harrassed men and women, are, economically speaking "undesirable citizens." What are now the living conditions of ordinary working class families in the United States? How much money do they spend in the effort to satisfy their wants? Is the money used in the wisest possible manner? Is the amount expended sufficient, in the present state of prices, to supply actual necessities? These are the questions which must be answered at once if the nation is to be prepared for a conflict that will call forth all the powers of a strong and healthy citizenry.

It was with the object of obtaining information that might, in some small degree, aid those who wish to know the facts with regard to standards of living among working class families in Boston, that the investigation, the methods and results of which are outlined in the following pages, was undertaken. As the group that did the field work was small

and the time short, the scope of the inquiry was necessarily confined to one section of the city—the district known as Roxbury. However, since this part of Boston contains a not inconsiderable portion of the total population of the city—about 17 per cent of it, in fact—and since the district is settled largely by English speaking people of the working class, the facts gathered may perhaps be valuable in arriving at a conclusion regarding the ability of working class families to maintain an "American" standard of living in Boston as a whole.

In February 1917, through the kindness of various social agencies in Roxbury,[1] the four Simmons students[2] who made the investigation were introduced to families in that district who said that they were willing to supply the information desired. From these, sixteen were selected for study. The period during which they were under observation varied from three weeks in one case to ten weeks in several others, but most of the families were visited for a term of six to eight weeks. Each housewife kept a careful record of all her expenditures, jotting down the items, with memoranda of the amounts bought and prices paid. These accounts were kept in an ordinary blank book, and no effort was made to classify the objects of expenditure. Regular weekly or semi-weekly calls were made by the students having charge of the investigation, and at these times the housewives' records were examined, and possible errors and omissions rectified. The data thus obtained were finally transferred to the students' own classified lists showing the weekly expenditures of each family for the various items of the budget. In this way, during the two months of observation, the investigators were able to obtain information upon which they could base fairly definite conclusions as to the standard of living of each family and the cost of such a standard with regard to food and housing. The data also threw some light upon the question of operating expenses, and the amount available for "sundries," i.e., for doctors' and dentists' bills, for insurance, for books and papers, for recreation, and other similarly important purposes. With regard to costs and standards of

[1] Norfolk House Centre, the Associated Charities-Roxbury branch, the Social Service Department of the Children's Hospital, and the Cecelian Guild. In particular the investigators acknowledge with gratitude the coöperation and assistance of Miss Emma Taft Knight and Mrs. Roy Cushman of the Norfolk House Centre, and of Miss M. Isabelle Tessier of the Social Service Department of the Children's Hospital.

[2] Miss Ruth Corwin, Miss Katherine Hagerty, Miss Dorothea Rice, Miss Margaret Stevens.

clothing, the facts are not sufficiently definite or detailed to warrant more than the barest generalization.

Research by the United States Bureau of Labor and by others[3] interested in the question of the cost of living in this country led to the conclusion that in the early years of this century a normal family consisting of father, mother, and three to five children, and living in an urban community must have an income of at least $750.00 in order to maintain without incurring debt a fair standard of living. The average family spent this income in about the following proportions:

FOOD	RENT	CLOTHING	FUEL AND LIGHT	SUNDRIES
per cent	*per cent*	*per cent*	*per cent*	*per cent*
41	17	14	5	23

In the hands of the average housewife, 41 per cent of a $750.00 income would, fifteen years ago, suffice to provide food for the "normal" family. The sum—about $5.90 per week—would procure the minimum of wholesome food necessary for the efficient and healthful development of each member of the family. Similarly, the amounts spent for housing and the other items of the budget might possibly procure for the family the indispensable minimum in each respect. In other words, $750.00 was ten or fifteen years ago, a large enough sum to provide a family of father, mother, and three to five young children with the necessities for the maintenance of a fair standard of living, provided that the money was wisely expended.

What were the possibilities in the spring of 1917? What sum should the family spend if it is to be adequately fed? What sum does it actually spend for food? Is the typical working class family undernourished to a degree dangerous to the welfare of the community? Does the high cost of food result in a lowering of the standards with regard to other necessities—housing, clothing, etc? As a very small beginning of a com-

[3] "The Cost of Living and Retail Prices of Food." Eighteenth Annual Report of the United States Commissioner of Labor, 1903.

"The Standard of Living in New York City." Robert Coit Chapin, Charities Publication Committee, N. Y. 1909.

"Family Monographs, the History of Twenty-Four Families Living in the Middle West Side of New York City." Elza G. Herzfeld, James Kempen Printing Co. N. Y. 1905.

"Wage Earners Budgets." Louise Boland More, Henry Holt & Co. N. Y. 1907.

"The Standard of Living Among the Industrial People of America." Frank Hatch Streightoff. Houghton Mifflin Co. 1911.

plete answer to these questions if asked in regard to Boston, the facts concerning a few families in Roxbury seem to be worthy of examination.

Professor Alice F. Blood, Director of the School of Household Economics at Simmons College, has reached the conclusion[4] that in the early part of the winter of 1916–1917 a family consisting of two adults and four young children—altogether amounting to four units by the Atwater Scale[5]—could barely satisfy their dietary needs by expending the sum of $8.00 per week. The weekly cost of food per unit would therefore amount to $2.00, which equals about 28½ cents per day.

Thus making no allowance for the rise in prices of other items, and considering merely the necessity of spending more for a minimum ration, we are justified in saying that the smallest income upon which a normal family could maintain a proper standard of living in a city like Boston was $850.00 per year—i.e., reckoning fifty working weeks per year—$17.00 per week; and if the amount spent for food was to be a proper proportion of the total expenditures, the family income in the latter part of 1916 should have been at least $1000.00.

During the winter of 1916–1917 food prices continued to rise. By the end of April, 1917, the rations recommended by Professor Blood would have cost the family considerably more than $8.00 per week. In Roxbury the families whose budgets were collected would have had to pay $10.93 per week[6] in order to secure all the food materials included in Professor Blood's list. In other words, the cost of the weekly minimum ration had increased by more than one-third. By the end of

[4] Unpublished monograph. December, 1916.

[5] The Atwater table of units is as follows:

	Units
Man, 17 years and over	1.0
Woman, 16 years and over	0.8
Boy, 16 years	0.9
Boy, 12–15 years	0.8
Boy, 10–11 years	0.6
Girl, 14–15 years	0.7
Girl, 10–13 years	0.6
Child, 6–9 years	0.5
Child, 2–5 years	0.4
Child, under 2 years	0.3

(Bulletin No. 46, U. S. Dept. of Agriculture.)

[6] Average of prices actually paid by families under investigation verified by visits to Roxbury stores. At present—February, 1918—the articles included in Professor Blood's list could not be bought in Roxbury for a total sum of less than $11.18, slightly more than the sum necessary last spring.

April, 1917, therefore, the simplest diet that would furnish adequate nourishment cost nearly $2.75 per unit per week. A family of father, mother, and four small children should have spent for food at that date a sum that would amount to more than $568.00 per year. In order to have proper food and also to meet the other expenses of a normal existence, the family would have had to spend at least $1100.00 per year. The weekly income, therefore, should have been about $22.00. It is hardly necessary to state that the majority of working class families have not such an amount of money at their command. For that very reason it is important to ascertain in as many cases as possible what their total expenditures really are, what proportion goes for food, to what extent the amount paid for food varies from the amount which should be expended if the family is to be properly fed.

Examination of the Roxbury budgets reveals the fact that at least eleven of the sixteen families were underfed. The amounts spent on food by these eleven households varied from a sum 40 per cent short of an amount that would have purchased a living ration, to an amount only 2 per cent short of that desirable minimum. Two families of this group spent less than two-thirds of the amount that should have been at their command for food purchases, and four families had only about three-quarters of the sum they needed. The average sum spent by these eleven families was about 20 per cent less than it should have been. In not very vivid contrast to this state of affairs the budgets of four other families show a slight excess of expenditure for food, an excess averaging about 6 per cent more than the sum necessary to buy an adequate supply. One family out of the group of sixteen spent approximately the correct amount.

The cause of the conditions summarized in the preceding paragraph was not that the families in question were extremely large, nor that their purchasing power was less than is usual in their class. Omitting from the calculation five families whose total incomes and expenditures were uncertain because of the presence of adults who contributed to the general fund only part of their wages, we find that the average family numbered 4.7 units, as measured by the Atwater scale. This is a group not very much larger than that which is usually regarded as normal. An income of over $1000 a year was implied by the sum total that it cost this average family to live—a sum amounting to about $20 a week. Obviously these families were in a position to spend as much as families of their class usually have at their disposal. They actually did spend

an average of $11.33 per week for food in March and April of last year, and although this was $1.50 less than the sum necessary to buy sufficient nourishment, it absorbed 56 per cent of their total resources. We are forced to the conclusion that if a living income is one of which not more than 40–45 per cent must be spent on food, then in these times even $1000 a year is not adequate to maintain an ordinary working class family in Boston.

Obviously, if an unduly large percentage of the total outlay of a family goes for food, a smaller proportion than is desirable remains for the purchase of the other necessities and comforts of life. Taking the Roxbury group as a whole[7] we found that of the average total outlay (about $20.16 per week) $2.50, or 12.4 per cent was paid out in rent—a smaller proportion of total expenditures than is considered desirable. It was only the eight smallest families, the average size of which was about that of the smallest family usually considered as "normal," that could afford adequate housing. These paid an average rent of $2.53 per week—i.e., about 16 per cent of their living costs—not far from the normal proportion.[8] For this sum, approximately $11.00 per month, they secured four rooms—an adequate amount of space, if we take the minimum to be one room to every one and one-half persons. These families evidently were not obliged to meet their high food costs by economizing to any serious extent in the matter of shelter, since there were other lines along which retrenchments could more easily be made. It was the larger families having five or more children, families obliged to cut down their expenditures in every direction, who were not properly housed. In order to economize they either lived in crowded quarters, or moved to larger but more undesirable apartments in cheaper neighborhoods. As a matter of fact, the rents paid by all the sixteen families were surprisingly uniform in amount. With one or two exceptions they were all between $2.00 and $2.75 per week. Two of the largest families paid even less rent than the average.

Ventilation and light in the houses occupied by these families was usually adequate for the maintenance of the health of the inmates. Only two families had a dark room, situated between the kitchen and the living room of a five room apartment, and used as a bedroom. Eight families—half of the group—lived in "three decker" apartment houses, having light and air in front and back. Others lived in two-family or

[7] Omitting five families mentioned on p. 151.

[8] See p. 149.

double houses and had some yard space. Three lived in detached houses, each with a yard, and air and light on all sides.

Every family, with one exception, had a private toilet in its apartment or house; one used a toilet in the cellar, in common with two other households. In some instances the toilet was practically a closet, without outside light or air, and separated from one of the rooms—often the kitchen—only by a curtain. Only two families had their own bath rooms, all had running water in their apartments, but only one had hot water. The rest heated water on the stove. Three families had stationary tubs for washing clothes and all had space out of doors for drying clothes.

Space for storing was limited, of course. Nearly all the families lived in houses with cellars, but rarely used these cellars. Food was never stored there, for fear of dampness and of depredations by other inmates of the house. Most of the families had a pantry or closet opening into the kitchen, where food and kitchen utensils were kept.

To sum up—we may say that the small family in Roxbury does not pay for shelter an excessive proportion of its income. Larger families are likely to suffer deprivations in the matter of space in which to live. In most cases ventilation and sanitation are fairly good. On the other hand, a serious defect that is practically universal in its occurrence, and is important because of its effect in increasing living expenses, is lack of space for keeping household supplies.

For light and fuel the family budgets under consideration showed an average weekly expenditure of about $1.27—approximately 6.6 per cent of the total outlay for all purposes. As a rule the kitchen stove was the only means of heating the dwelling, at any rate during the greater part of the year. Coal was generally used as fuel. Five families supplemented the services of the coal stove with those of a portable gas stove, and one family used a kerosene stove for light cooking. Only five or six families bought kindling; the rest collected it wherever they could find suitable material. One, for example, whose proportionate expenditure for coal was considerably below the average, effected this economy by the use of wood procured from an old barn falling to ruin not far away from their house. This wood was used, not only for kindling, but even instead of coal for the maintenance of the fire throughout the day. The average amount of coal used by the family of ordinary size would seem to be in the neighborhood of 150 pounds per week.

Three families bought the year's supply of coal early in the autumn, paying $7.25 per ton and thereby keeping down costs, as later in the winter the price per ton rose considerably. Most of the families, however, bought by the hundred weight, paying 60 to 65 cents per hundred weight, or by the bag, paying 17 cents per bag of 25 pounds. A ton of coal bought by the bag cost $13.60. Thus families buying their fuel in these small quantities paid more than $6.00 per ton in excess of the price paid by the few families who had the funds and the storage facilities to buy in large quantities before the winter set in.

For lighting purposes six families, for the most part those having the hardest struggle to make ends meet, use kerosene only. Six use both kerosene and gas; three use gas only; and one uses gas supplemented by candles.

In conclusion, it may be said that, with the greatest economy possible for families situated as are those of this particular group, 6.5 per cent of the total expenditure must go for fuel and light, i.e., 1.5 per cent more than the average discovered to be "normal" for such families fifteen years ago.[9] The cost of fuel and light has increased to such an extent that more money must be spent to secure a minimum amount of heat and illumination.

Facts in regard to costs and standards of clothing among the families interrogated were difficult to obtain. Some of them spent nothing for clothing during the weeks of the investigation. One family apparently spends nothing the year around, and is clothed entirely at the expense of a relative. In the circumstances, the investigators were forced to depend largely upon the general information given them by the women for the facts which enabled them to draw conclusions. Only a few families bought new clothing, and even these bought the more expensive articles—men's outfits, for example—on the installment plan. Thus one man, the nature of whose work required him to dress comparatively well, bought practically all his apparel at a wholesale store, and paid the store $3.00 every two weeks throughout the year. In another family, most of whose clothing was bought new, the overworked mother made almost everything—even the hats worn by herself and the children. Nearly all of the families bought the greater part of their clothing at second hand, patronizing church rummage sales, the Morgan memorial, or regular second hand clothing shops. In every household garments

[9] Cf. p. 149.

were mended and made over until they were entirely worn out. All these devices for saving were part of the everyday routine, evidently made obligatory by the high cost of food and other absolutely necessary commodities. Most of the women said, too, that whenever special economy was necessary they cut down still further their expenditures for clothing, lessening the outlay for food only when further retrenchment in the matter of clothing was impossible.

Under the heading "Sundries" the investigators kept a record of the expenditures of each of the sixteen families for household furnishings, education, health, insurance, dues and contributions, recreation, and other miscellaneous purposes.

For household furnishings small sums, averaging only a few cents a week, were spent, and the usual objects of the expenditure were cleaning materials and kitchen utensils.

Fourteen families each bought a daily paper, and occasionally spent a few cents on post cards or other stationery. Two families spent nothing at all for these objects during the weeks in which their accounts were examined. Only one family subscribed for a periodical, a religious magazine costing fifty cents a year.

Expenditures for health were very small, and it was a matter of interest to observe that no money was wasted on patent medicines. Three families spent nothing at all for the maintenance of their health during the weeks of the investigation. Most of the families, however, spent an average of a few cents a week for drugs and for treatment. Several sent their children to the Forsythe Dental Infirmary and paid small sums for the services rendered them there. One or two others availed themselves of the opportunities offered by hospital dispensaries for treatment of chronic troubles, as in the case of a child who had suffered from infantile paralysis.

Four of the families reported nothing given as dues or contributions. The others all made a weekly contribution to the church, the amount varying from 2 cents to 40 or 50, according to the size and to the means of the family. The usual amount was 20 or 30 cents. Only two of the families made regular payments to a labor union. Several of the women paid small dues to clubs connected with the social settlements.

The amount spent on recreation was pitifully small. Ten of the families spent nothing at all for this purpose during the weeks of our acquaintance with them. The other six groups went occasionally to the

moving picture theatres—two families, in fact, went every week. But most of the families relied for recreation upon free entertainments of various kinds, including those given at the settlements and churches.

A large proportion of the outlay for miscellaneous objects by the majority of the families consisted of carfare for those members who live some distance from the place of their daily work. A number of them were obliged to lay aside for this purpose at least 60 cents a week.

Such expenditures as those that have just been described leave very little money for other things of a more frivolous nature. Some of the men and the older children had 50 cents a week as "spending money" and rendered no account of the objects for which the money went. Now and then a woman indulged in candy or a "soda." Most of the miscellaneous objects, however, for which were spent the sums recorded in the last column of the family budgets were really necessities.

It must be admitted that there is little need for urging greater economy upon the majority of these people. Their purchases, inadequate as they often are to satisfy their needs, are made, for the most part, with a thoughtfulness that is almost pathetic. It is the eating of the cheaper cuts of meat, and the spotted vegetables sold by the dealer at special rates in order to be rid of them; it is the wearing of second-hand clothing, the crowding together in small dwellings, and the abstinence from amusements that enables some of these families to exist at all. A trained dietitian might in certain cases advise the purchase of fewer doughnuts or crackers and more vegetables, or do away with the small expenditures for cake or candy, but even she could not administer the sums that several of our familes have to spend for food in such a way as to supply them with proper nourishment. There is, it must be admitted, waste in the expenditure of these small incomes, but the waste is the fault of society rather than of the individual. The purchase of food and fuel in small quantities, for instance, and, consequently, buying at greatly increased cost, is inevitable as long as the funds to be spent are so small as to prohibit large purchases at any one time or the occupancy of dwellings large enough to allow storage of supplies. Do what she can, then, the housewife cannot provide properly for even a small family—her husband, herself, and two or three young children—unless she has at least $20.00 to spend each week. Considerably more—at least $24.00—should be at the disposal of the ordinary workingman's family, which is apt to have four or five children, and often more.

THE HOME ECONOMICS TEACHER IN THE RURAL SCHOOL

HELEN GRAHAM

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This is the day of the rural school, and the great progress made in these schools in the past few years has been remarkable. It is making itself felt in the higher institutions of learning in that their standards have been raised because of the more thorough preparation in the public school. It is also resulting in the general social and economic improvement of the rural community. Another agency has been a strong movement among rural educators to make of the school the social center of the community, and no one person could do more toward carrying out this aim than the right kind of a home economics teacher. It is this teacher and her work that will be discussed in this paper.

The teacher will be considered from two standpoints: first her personal requirements, or the characteristics of a successful rural home economics teacher, and second, her field of usefulness—the things that she can do to meet some of the problems both of the school and the community.

Her first requisite should be a thorough knowledge of her subject, both practical and theoretical. She should be just as able to cook a good wholesome meal with the minimum of time and labor, as she is to find out the number of grams of protein and the number of calories of heat to be gotten from it. She should be just as capable of making sausage and cooking "boiled dinner" as of making the three accepted types of salad dressing or an angel food cake—and just as well able and as interested to help a mother to make over a last winter's worsted dress for her daughter in school as to design and make an elaborate evening gown of georgette crepe and chiffon. She must know and be able to do anything in the way of modern home industries that any one in the community can do and much that they cannot do, without parading her knowledge or ability.

This rural home economics teacher must know something about rural community life and be able to adapt herself to it without feeling a sense of superiority or acting the part of the tender-foot. Otherwise she will separate herself from her students and her people. They will feel that she is not one of them—that she is different—has been brought up under other conditions and cannot appreciate them and their ideas of life. So her influence there would be crippled. She need not hope to bring

about reforms in the home or social life of the community by criticising their customs, but by having them discover for themselves the advantages of better methods of doing things.

She must never feel that she is too big for the place, that she is wasting her sweetness, her culture, on the rural village, for if that is her attitude she will soon find that for some reason she is not filling the place, that it is too big for her. For indeed it is a much harder place to fill than the same work in a town or city school. There is the difficulty of getting material to work with in a very limited market, the hardship of an inadequate equipment often, and, worse than either, there is sometimes a sentiment in a small place against teaching anything so far from the three "R's" as home economics. They refuse to accept "Right Living" as the fourth "R" as the home economics teacher is trying to present it. So she must be able to create a demand for what she has to offer, to prove that such training is valuable for the best development of the race. Perhaps it will take a whole school year to make home economics popular in a town; then surely the teacher would need to go back to the same school at least the second year when her work has only been begun in the first. Having the interest of the community at heart, she will want to see that her plans are carried out and her own work and policies completed. Often when I ask students entering the Home Economics department at L. I. I. what home economics work they have taken in the high school from which they graduated, they have occasion to mention something about the three teachers they have had in three or four years.

Another important characteristic of this model rural home economics teacher is the ability to do the best possible work with the equipment and material that may be had under the circumstances—not the material and equipment on hand, necessarily, for it may be that she could get better things and more sanitary laboratory conditions by exerting herself a little. In that case it would cease to be a virtue to just "get along" with what one has on hand when she could do better. On the other hand our young teacher is likely to feel that her rural school laboratories must be exactly on the plan of the ones at the school from which she graduated, and if she finds them entirely different she may take any one of several attitudes according to her disposition. She may feel discouraged and decide that with such equipment she could not be expected to do very much; so she will be content to do home economics on a very small scale. If she is very ambitious, but impractical, she will sit down and recall every

thing in her alma mater laboratories and make a list to hand to her superintendent which will call for more money perhaps than he has to spend for equipment for the whole school during the year. Naturally he sees that she and her wants are out of the question, and she will probably get nothing, but the cause of home economics will get a black eye with that superintendent.

But if our teacher has the qualities of "carefulness and inventiveness and watchfulness and willingness and readiness of appliance, along with the economy of her great grandmothers and the science of modern chemists, with English thoroughness and French art" to use Ruskin's oft quoted words, she will take stock of what is on hand and what may be made from obtainable materials. Then she will decide which things are most necessary and which she can dispense with without crippling the work and will proceed to set up an equipment that is the best for her particular conditions.

Another asset that the home economics teacher can use is correct dressing. Any teacher in a small place is more or less of an example as to dress, but the home economics teacher has an exceptional influence in this way, since she is supposed to have had extra training in the making of clothes. For this reason she has an especial opportunity to use her example and influence toward elegant simplicity and neatness in dress. Since extravagance in dress has become such an alarming form of intemperance among girls and women especially, some woman of standing in each community needs to use her influence in the cause of sensible dressing. On the other hand if the home economics teacher wears seven dollar waists, twenty dollar hats, twelve dollar shoes, and other things in proportion, the girls will think she is wonderful, but will get the idea that in order to be a "high brow," they must dress the part, and some of them will get the notion that respectability depends upon one's clothes and what one has—a rather common notion. I once heard a woman defending the social standing of a family which had recently moved to her town by saying that they are "just lovely people—why, every sheet in their house is hemstitched by hand"; as though having wasted all that time in which they might have been gaining real culture made them "lovely people." If the home economics teacher is having that kind of an influence in a community, she is falling short of what is expected of her.

Then there is so much that the home economics teacher can do for the community that other teachers could not do so well. She can do much toward developing school and community spirit and pride by

getting up a good exhibit for the parish and state fairs. If she has a creditable exhibit, the students will be proud of it; they will just have to be at the Fair to see how it compares with the others. Their parents too will be glad to see what *our* daughters and *our* school and *our* community can do at *our* State Fair. It is a wholesome spirit, a spirit that is sure to lead to progress.

If the teacher is thorough and practical, mothers will soon see that their daughters are receiving training that they themselves might profit by; and when this teacher suggests the organization of a Woman's Home Economics club to meet at the school building on Saturdays, some of them will be interested enough to join. This club would be made entirely worth while if they studied together such things as Home Management, A Well Selected Diet, Infant Care, Home Nursing, House Sanitation or any subject that would appeal to the homemaker. The social side of these meetings would make them popular if nothing else would, and so the teacher would have to see to that side of the organization.

One great thing that the teacher can do for her study club is to introduce to them the readily available source of reliable information in the United States government bulletins. She can remind them that there is hardly a phase of home life that is not discussed in one or more of these bulletins. They can be grouped together according to subjects to form texts for almost any of the home economics subjects that these mothers might take up:—for instance, for the child study course, there are four bulletins to be had for the asking: Prenatal Care, Infant Care, Food for Young Children, and School Lunches. For the food and cookery classes, there are not only bulletins on Milk, Eggs, Meat, Fish, Bread, Cereals, Vegetables, but the new series on How to Select Foods, and such bulletins as Fresh Fruits and Vegetables, Conservers of Staple Foods, and others that show how to adjust our living to the present emergency needs. There are at least forty bulletins from the Department of Agriculture on the subject of foods, to say nothing of many valuable ones from the Bureau of Chemistry, The Children's Bureau, and others.

Two bulletins that the rural home economics teacher would do well to use and demonstrate are those on the "Iceless Refrigerators" and "The Fireless Cooker." Both of these conveniences would be very acceptable in a rural community where household conveniences are not very common.

There is another important movement that some one needs to start in any public school—that is a consideration of the physical condition

of every student. Any public school teacher will tell you that the condition that causes her the most trouble and that stands most in the way of her success as a teacher, is the physical unfitness of a large per cent of her students; that many of them are stupid, lazy, mentally inert because they are physically unfit. Often these children are below normal physically (and consequently mentally) because of some poor home condition, perhaps a lack of intelligent care when they were babies or young children. There are several ways in which the home economics teacher can endeavor to remedy these conditions.

One thing that she can do toward this end is to improve the noon meal of the school children, either by supplementing it with a hot dish served in the school kitchen by the older girls in the cooking classes or by giving special instructions on the cooking and preparation of foods suitable for the school lunch to both her students and their mother's club. It is a very simple matter with the older girls' help to prepare a bowl of cream soup or some other simple dish to supplement the lunch from home, or to serve milk to the students. There is usually no trouble in getting material for these lunches by letting the students furnish by turns the things that they have most of at home.

This plan for the noon meal has more advantages than simply furnishing so much protein and so many calories; it gives the teacher a chance to teach table manners, to bring out the bashful student, and to establish various social virtues that might otherwise never come to light. Again, she can have an influence on the daily lives of her students as to hygiene and sanitation, which will affect their health materially.

After all, it may seem that a great deal is expected of her; that she is expected to give to the community too much of her time out of school, and too much to the school itself, but there are many just such teachers in the state who are doing just these things and are happy in doing them. It may require a great out-put of her young life and energy, but the possible results in a big cause will fully repay her best efforts.

HOUSEHOLD PHYSICS AND PRACTICE COTTAGE WORK

B. L. STEELE

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During the past five years the writer has given a special course in physics for the students in the Department of Home Economics. An unusual effort has been made to adapt the course to the needs of this particular group and to make its practical value as great as possible. The results herewith presented represent one phase of the course.

Each year, efficiency tests of gas, gasolene, kerosene, and alcohol burners, and of electric cooking devices have been made by the young women in the course. The heating equipment needed for these experiments has been loaned to the laboratory in many instances by manufacturers or local dealers. The coal range tests have been made on a great variety of ranges, both in the laboratories of the Home Economics Department, and in the homes of resident students and sorority houses.

Table I gives typical results of efficiency tests of electric cooking appliances. Similar tables might have been given for the gasolene and kerosene burners and the coal range.

TABLE I

Efficiency tests of electric cooking appliances

ITEMS	SURFACE HEATERS		ENCLOSED HEATER	IMMERSION HEATER
	A	B		
Mass of water heated (grams)	4,536	4,536	2,268	1,360
Room temperature (Centigrade)	21	22	21	22
Initial water temperature (Centigrade)	18.2	22.6	16.4	19.5
Final water temperature (Centigrade)	93.2	96.5	65.0	92.0
Temperature increase (Centigrade)	75.0	73.9	48.6	72.5
Heat absorbed (calories)	340,200	335,210	110,225	98,600
Heater turned on	3:00	12:13	7:37	9:30
Heater turned off	3:32	12:58:30	8:33	9:46:49
Time in use (seconds)	1,920	2,730	3,360	1,009
Current (amperes)	10.32	8.69	1.63	4.00
Potential difference (volts)	115	115	110	110
Electric energy expended in heater (joules)	2,278,656	2,730,000	602,448	443,960
Heat equivalent of electric energy (calories)*	544,221	652,000	143,880	106,033
Efficiency (per cent)	62.5	51.4	78.6	93.0

*4.187 joules are equivalent to 1 calorie.

Nearly every kind of electric heating appliance was used, and under widely varying conditions. Room temperatures, existence of air currents from open windows, the material and the condition of the surface of the utensil used, wattage of the heater, relative size of the heater and the utensil, and quantity of water heated, were all found to affect the efficiencies very considerably, particularly those of the surface and immersion types. The average working efficiency of the electric range, as used in the home depends on so many factors, that to make an accurate estimate is difficult. In the hands of those who have had a bit of experience in making the proper combination of surface, enclosed, and immersion heaters, the efficiency should probably be above 60 per cent.

In determining the maximum of efficiency of the coal range, the entire top was covered with large vessels of water, e.g., wash boilers or 5 gallon gasolene cans, and the oven space was similarly utilized. The fire was not lighted until the initial water temperature had been taken, and when 2 pounds of kindling and 10 pounds of coal had been completely burned the record of the final maximum temperature was made. It was estimated that, as the coal range is used for cooking in the average home, not more than one-fourth of the available space is utilized at any one time, and that the cooking operations are being carried on less than one-half of the time during which the coal is burning. If this estimate is correct the *average cooking efficiency* of the coal range does not exceed 2 per cent. The efficiencies of flame contact appliances, which included standard kerosene and gasolene blue flame burners, alcohol lamp for chafing dishes, and gas burners have been found to vary from approximately 20 per cent to 35 per cent.

Table II gives the average efficiencies of various kinds of equipments. For the purposes of comparison there is given in Table III the value

TABLE II

Average efficiencies of equipment

KIND OF COOKING EQUIPMENT	EFFICIENCY
	per cent
Coal range (entire space utilized)	18
Coal range estimated home cooking (about)	2
Flame contact burners (kerosene, etc.)	28
Electric heaters—surface	45 to 65
Electric heaters—enclosed	70
Electric heaters—immersion	90

TABLE III

Value in calories in 5 cents worth of fuel

FUEL	CALORIES
Coal (Rock Springs) at $10.00 per ton	32,256,000
Kerosene at 20 cents per gallon	8,550,000
Gasolene at 25 cents per gallon	6,130,000
Alcohol at 75 cents per gallon	1,340,000
Electricity at 3.85 cents per kilowatt hour	1,116,000

TABLE IV

Heat available in 5 cents worth of fuel

FUEL	CALORIES
Coal (range at 2 per cent efficiency)	645,160
Kerosene (range at 28 per cent efficiency)	2,394,000
Gasolene (range at 28 per cent efficiency)	1,716,400
Electricity (range at 60 per cent efficiency)	669,600
Alcohol at 28 per cent efficiency	375,200

in calories of 5 cents worth of each of the various fuels at the prices prevailing in Pullman, Washington, in December, 1916.

Table IV gives the heat available for cooking in 5 cents worth of each of the fuels, proper allowance having been made for the working efficiencies of the various cooking appliances.

For the purpose of affording laboratory work in the course in household administration, the Department of Home Economics maintains a practice cottage. The seniors in home economics each year are divided into groups of four, and each group, together with a chaperon, spends four weeks at the cottage, each student having the management for one week. Each one makes out a week's menus and determines the necessary quantity of each article of food according to the needs of the group. The young women are "weighed in" at the beginning and "weighed out" at the end of the month and in most cases are found to have fared better than on their regular boarding house or home cooking.

During the past year, through the generosity of the Washington Water Power Company it has been possible to have the practice cottage equipped with a Westinghouse electric range in addition to the coal range, and Prof. Agnes Craig, Head of the Department of Home Economics, made it possible for us to obtain comparative cooking cost data for a family of five. During the winter months when the furnace was in use the water front of the coal range was disconnected, the hot

water for domestic use being furnished entirely by the coil in the furnace.

In the late spring the water front was again connected up and all hot water needed was heated by the range in connection with the cooking.

Table V gives a week's menus and Table VI gives the cost of cooking

TABLE V

*A typical week's menus cooked on electric range**

DAY	BREAKFAST	LUNCH	DINNER
Monday	Cream of wheat, corn muffins, syrup, coffee	Creamed potatoes, bread and butter, apple sauce	Pork roast, potatoes, tomatoes, apple sauce, bread and butter
Tuesday	Baked apple, muffins, coffee	Rice and cream, bread and butter, salad	Spaghetti and cheese, fried potatoes, buttered carrots, cottage pudding, bread and butter
Wednesday	Graham mush, rolls, coffee	Cheese sandwich, apple sauce, cake, chocolate	Veal loaf, baked potatoes, creamed onions, gravy, rolls, jelly cake, coffee
Thursday	Marmalade, rolls, coffee	Escalloped potatoes, tea, baked apple, bread and butter	Creamed salmon on toast, mashed potatoes, bread and butter, apple pie
Friday	Muffins, cereal, syrup, coffee	Salad, pudding, bread and butter	Pork chops, potatoes, tomatoes, bread and butter, custard
Saturday	Hot cakes, syrup, cereal, coffee	Potatoes, apples, onion salad, rice and cream, bread and butter	Roast pork, baked potatoes, creamed onion gravy, bread and butter, cream, cake, coffee
Sunday	Fried mush, toast	Bread and butter, fruit cake	Veal roast, gravy, baked potatoes, creamed onions, bread and butter, cream, cake, coffee

* It must be remembered that the menus given were planned and used last year before the present food problem of the war arose. The menus are not considered ideal, but represent, perhaps, pretty closely the meals of an average American family.

TABLE VI

Cost of cooking week's menus on electric range

DAY	KILOWATT HOURS					
	Breakfast		Lunch		Dinner	
	Oven	Plate	Oven	Plate	Oven	Plate
Monday	0.5	0.1	0.7	0.2	1.0	0.0
Tuesday	0.7	0.5	0.5	0.0	0.6	0.4
Wednesday	0.5	0.1	0.5	0.0	2.4	0.7
Thursday	0.6	0.0	1.0	0.0	1.4	0.0
Friday	0.6	0.2	0.6	0.0	0.3	0.8
Saturday	0.0	1.0	0.5	0.2	2.0	0.6
Sunday*	0.0	0.3	1.1	0.4	0.0	0.0
Total kilowatt hours	5.1		5.7		10.2	
Total cost (cents)	19.6		21.9		39.3	
Cost per meal	2.8		3.13		5.65	
Total cost for week (cents)					80.0	
Average cost per meal (cents)					3.85	

* On Sunday dinner was served at noon, and supper at night. The figures for dinner are placed under lunch.

TABLE VII

Cost of cooking week's menus on coal range, water front disconnected

DAY	POUNDS					
	Breakfast		Lunch		Dinner	
	Wood	Coal	Wood	Coal	Wood	Coal
Monday	3.00	8.00	2.00	6.00	3.50	6.00
Tuesday	3.00	5.00	2.25	6.00	3.00	6.50
Wednesday	4.00	4.00	3.00	4.50	3.25	6.25
Thursday	3.00	6.50	4.00	7.00	5.00	9.00
Friday	3.00	2.75	2.00	2.75	2.50	6.00
Saturday	2.00	1.75	6.00	2.00	5.75	5.00
Sunday	3.75	5.25	1.50	5.00	1.50	8.00
Total pounds	21.75	33.25	20.75	33.25	24.50	46.75
Costs (cents)*	6.5	16.6	6.2	16.6	7.35	23.4
Total	23.1		22.8		30.8	
Cost per meal	3.3		3.25		4.4	
Total cost for week (cents)					76.70	
Average cost per meal (cents)					3.65	

* Value of 1 pound of wood, 0.3 cents; pound of coal, 0.5 cents.

them on the electric range. Two meters were provided, one for the oven and boiler and one for the plates. The meters were read before and after each meal, and in every case tenths of kilowatt-hours were carefully estimated. During December, 1916, when this week's cooking was done, the average cost of a kilowatt-hour for cooking purposes in Pullman was 3.85 cents; this value was used in calculating all cooking costs.

The cost of a typical week's cooking on the coal range with the water front disconnected is detailed in Table VII. Table VIII gives the cost of a week's cooking with the water front connected up.

TABLE VIII

Cost of cooking week's menus on coal range, water front connected

DAY	POUNDS					
	Breakfast		Lunch		Dinner	
	Wood	Coal	Wood	Coal	Wood	Coal
Monday	5.50	4.50	6.50	9.50	3.75	9.75
Tuesday	3.75	6.50	9.25	7.00	6.00	7.50
Wednesday	6.00	9.00	5.50	4.25	5.50	3.25
Thursday	4.00	2.00	9.00	9.75	9.00	9.75
Friday	4.50	9.75	4.50	5.00	5.50	13.50
Saturday	6.75	5.50	6.00	11.50	3.75	11.25
Sunday	9.25	15.25	5.00	0.00	3.00	18.00
Total pounds	39.75	52.50	45.75	47.00	35.50	73.00
Cost in cents	11.9	26.25	13.7	23.5	10.95	36.5
Total (cents)	38.15		37.2		47.45	
Cost per meal	5.45		5.3		6.78	
Total cost for week						$ 1.23
Average cost per meal						.0585

In all, three weeks' cooking was done on the coal range with the water front disconnected, four weeks' with the water front connected, and five weeks' cooking on the electric range. Table IX summarizes the average costs per week and per meal of this work.

In considering the above results the fact that the work was carried on by students who were busy with other regular college work must not be lost sight of, and it should be mentioned also that each of the 19 young women who lived in the practice cottage had had considerable experience cooking on the coal range and that none of them had had experience with the electric range. Each student, however, whether cooking on

TABLE IX

Summary

EQUIPMENT	AVERAGE COST	
	Per week	Per meal
	cents	*cents*
Coal range water front connected	119.6	5.70
Coal range water front disconnected	77.4	3.67
Electric range	78.5	3.72

Using wood, with Washington fire wood at $11.00 per cord the cost per week would be 88.2 cents; per meal, 4.2 cents.

the coal range with or without the water front connected, or on the electric range, was instructed to practice economy of "fuel" as much as possible.

HOW MUCH FOOD DOES IT TAKE TO SUPPLY US WITH THE CALCIUM WE NEED?

MINNA C. DENTON

The following table illustrates the paucity of calcium in most common foods, with the exception of milk. The amount of calcium oxide contained in these designated food portions, 0.4 gram, is little more than half the amount required daily by an average adult, and only about one-third of the amount needed by the prospective or nursing mother. In most cases, the foods listed here, are chosen because they are richest, not poorest, in calcium. Most meats, fish, and many cereal foods, fruits, and vegetables, would need to be given in enormous amounts to furnish even this modest portion of calcium.

If large amounts of greens such as chicory, endive, lettuce, watercress, can be eaten, these are valuable sources of calcium. This means, however, that they must be eaten cooked (steamed, or cooked in very little water). Amounts used in salads (10 to 25 grams) are too small to be significant. Oatmeal is higher in calcium than are other cereals, yet 15 to 20 servings (as breakfast porridge) are required, to yield 0.4 g. of calcium oxide.

With regard to vegetables and other foods boiled in water which is thrown away, it must be remembered that this ordinarily leads to a loss of about one-fourth of the calcium which they contain.

It will be noted, even from the few analyses available, that vegetable foods are especially liable to vary in their mineral content. Doubtless character of the soil and amount of rainfall have a good deal to do with these variations, apart from the amounts of each mineral constituent more or less characteristic of different species of plants.

It will also be noted that method of manufacture has a good deal to do with the ash content of foods which have undergone household or factory manipulation. (See cottage cheese; differences in water content doubtless play an important rôle here. See molasses; not only the original calcium content of the plant is here concerned, but also, evidently, the calcium added in clarifying the raw cane juice from which sugar is extracted, would have a considerable influence.)

Amounts of food material yielding 0.4 gram of CaO

After analyses given in Sherman's "Chemistry of Food and Nutrition," pp. 332–337; except when otherwise specified. (All weights refer to edible portions only.)

FOOD MATERIAL	COMMON MEASURE	WEIGHT IN GRAMS	WEIGHT IN OUNCES	NUMBER OF SERVINGS	RESULTS OF OTHER ANALYSES
Milk, whole	½ pint	238	8.4	1 large	Higher†
Buttermilk	About ½ pint	267	9.4	1 large	
Cream, rich (31 per cent fat).	½ pint	278	9.8		
Cheese, hard (American)*		36	1.3	1 large	Lower*
Cheese, hard (Swiss)*		25	0.9	1 large	
Cheese, cottage		133	4.7		Less than half as much*
Eggs, whole, 50 grams each	8½ eggs	430	15.2	8½	
Egg yolks, 18 grams each	11 yolks	200	7.0		
Fruits					
Currants, fresh		800	28.2	10	
Currants, dried	2 cups	290	10.1	5 (sauce)	
Dates, dry	45 dates	400	14.1	5 (sauce)	
Figs, dried	5 figs	134	4.7		
Oranges, ½ pound each	3 oranges	667	23.5	6 (of ½ orange)	
Prunes, 50 to the pound	74 prunes	667	23.5	15	
Raisins	4 cups	500	17.6	12 (sauce)	
Rhubarb		667	23.5	5	

* Adequacy and Economy of Some City Dietaries, Sherman and Gillett.
Forbes' analyses (Bul. 255, Ohio Agr. Exp. Sta.) are somewhat lower than Sherman's.
† Bul. 28, Office of Exp. Sta., U. S. Dept. Agr., p. 55, footnote.

Amounts of food material—Continued

FOOD MATERIAL	COMMON MEASURE	WEIGHT IN GRAMS	WEIGHT IN OUNCES	NUMBER OF SERVINGS	RESULTS OF OTHER ANALYSES
Vegetables					
Cabbage		585	20.6	5 or 6	
Carrots		520	18.4	5 or 6	
Cauliflower		235	8.3	2 or 3	
Celery		400	14.0	4 or 5	
Leeks		500	17.6	5 or 6	
Lettuce		800	28.3	28	
Onions		667	23.5	6 or 7	
Parsnips		444	15.7	4 or 5	
Potatoes		2,500	5.5 lbs.	20	
Radishes		800	28.3 oz.	28	
Rutabaga		400	14.0	3 or 4	
Spinach		444	15.7	3 or 4	
Tomatoes	13 large	2,000	4.0 lbs. 6.5 oz.		
Turnip greens		84	3.0	1	
Turnips		450	15.9	4 or 5	
Legumes					
Beans, navy, dried	Nearly 1 cup	182	6.4[1]	4 or 5	
Beans, lima, dried	2 cups	400	14.0[2]	8 to 12	Somewhat less*
Beans, string, fresh		533	18.7[3]	6	
Peanuts		400	14.0		
Peas, dried		286	10.1[4]	5 to 8	About one-half as much*
Nuts					
Almonds		133	4.7	5	Same result*
Chestnuts, fresh		1,000	2 lbs. 3.25 oz.		
Pecans*		331	11.7 oz.	12	
Walnuts		370	13.0		
Sugars and sirups					
Maple sap		235	8.3		
Maple sirup*	9 tablesp.	256	9.0		
Corn sirup*	20 tablesp.	555	19.5		
Molasses (not designated)	2 tablesp.	44	1.5		
Molasses (New Orleans)*	3 tablesp.	77	2.7		
Molasses (Porto Rico)*	2 tablesp.	55	2.0		
Sugar, brown (molasses)*	40 tablesp.	374	13.2		

* Calculated from analyses given in Adequacy and Economy of Some City Dietaries, Sherman and Gillett.

[1] After cooking, 12.8 to 16 oz. [2] 28 to 35 oz. [3] 18 oz. [4] 20 to 25 oz.

CONSERVING WOMAN POWER IN WAR TIME

MARY ALDEN HOPKINS

Every woman must have shelter, nourishing food, and satisfying recreation if she is to be of her full worth to the world. This is as true in time of war as in peace. No woman can carry her part of the burden successfully if she is frightened, sickly, or overworked. Men do not always understand this. Sometimes women have to protect each other.

The War Work Council of the National Board of the Young Women's Christian Association was formed for just this purpose. It was called into existence in June, 1917, to guard the interests of American women affected by the war. To aid and advise them, a $4,000,000 war budget was appropriated. An even larger sum of money was raised before Christmas. Hostess houses in military camps and cantonments, erected at the requests of the commandants, received $900,000. The sum of $500,000 was put aside for emergency housing of the employed girl in camps and in industrial centers. American women who cannot speak English received for translators and advisors $100,000. The Bureau of Social Morality speakers was continued and increased with a like amount. Work in colored communities affected by the war received a donation of $200,000. For women in France and Russia, so burdened by the great war, $1,000,000 was set apart. The increased staff, emergency calls, and miscellaneous expenditures took the rest of the $4,000,000.

The women who form and carry on the War Work Council are those whose names guarantee its sincerity and effectiveness. The Council members are chosen from all over the country.

Hostess houses in the cantonments where thousands of soldiers are gathered from every state were the first phase of the War Work Council's activities. They are designed for the comfort of the wives, mothers, and sweethearts who come to the great camps to see their soldiers. No house is erected except at the direct request of the commandant. Fifty-three are finished and in use; others are being built; still more have been asked for. These houses have been designed by women. Miss Julia Morgan is in charge of construction on the Pacific coast, Miss Fay Kellogg in the southern field, and Miss Katharine Budd in the middle west.

Each hostess house contains a large reception room where hospitality is symbolized by a cheerful fire in a huge stone fireplace. A quiet rest room gives the woman who has traveled some distance a chance to recuperate while her soldier is being summoned by telephone. A nursery

under the charge of a trained nurse is a haven of refuge for tired babies. A cafeteria provides food, not only for the visitors, but for the boys who are tired of a soldier's fare. In those great cantonments miles long and stretching over thousands of acres, the hostess house is the only spot where a woman has a right to set her feet.

Girls always have been the special charge of the Young Women's Christian Association in time of peace. In the period of mobilization and preparation for war, the War Work Council gives them increased attention. Both the girls in industry and girls at home are confused by the abnormal conditions. Girls' club work is being furthered by the War Work Council in all towns and cities adjacent to military camps for the purpose of stabilizing the girls' emotional response to the unusual conditions which surround her. Forty-six social centers for girls in these neighborhoods were opened before the war had been six months in progress. Sixty-five specially chosen workers were placed in charge to guide the girls' recreations in safe paths.

The Patriotic League deals with girls in larger groups, and is proving a safe-guard to the dangers incident to the change in our usual social restraints. The organization expresses its purpose in its pledge. "By doing better than ever before whatever work I have to do; by rendering whatever special service I can to my community and country; by living up to the highest standards of character and honor and helping others to do the same."

All of the protections which are thrown about the white girl in this emergency time are doubly necessary in the case of the colored girl, and everything is being done for her that is being done for the white girl. The matter of her safety is placed in the hands of trained and efficient leaders of her own race.

The lectures on social morality that have always been a feature of the Young Women's Christian Association's influence have been extended and the number of lecturers increased to fourteen.

Women who are the most helpless of all when their husbands are called into the army are perhaps those women from foreign countries who never have learned to speak English. When the husbands or sons upon whom they have depended are called into service, they have lost their English tongues. The Foreign Language Service Bureau has been established with branches in industrial centers and in camps where foreign men are gathered to assist these women in arranging their family affairs. Translators explain in twelve languages about soldiers' insurance, separation

allowances, exemption papers, postal regulations, food conservation, and the many other matters which the usual citizen learns without effort.

Calls from France and Russia for help in feeding the over-burdened women who manufacture the munitions of war came to the War Work Council very early last year, and twenty-one industrial experts, under the supervision of Henrietta Roelofs, were sent to aid French women in establishing in the great industrial centers, foyer-canteens for factory women. These are rest and recreation rooms combined with cafeterias. Attention is also being given to the needs of our own American nurses, hundreds of whom are already in France. The letters sent back by the American women in France portray the desperate situation of French women in the fourth year of the war. The million dollars which the War Work Council devotes to helping European women is all too small.

The two War Work Council secretaries first sent to make a general survey of conditions in Russia wrote back of long lines of women waiting for hours to receive their portions of the scanty food supply. Some quicker form of distribution of food among the women working all day long in factories was a crying need. The cafeteria system seems to be the best method for the situation. "Tea reading rooms," the Russian women call such restaurants. Six industral experts were soon dispatched from America to assist the two women already in Russia. Whether or not we are sympathetic with the political situation in Russia, we must not fail the Russian women who ask for our assistance.

Although the activities of the War Work Council directly concern women they are of equal importance to men. Seeming progress made at the expense of women is really no progress at all. The conservation of women's strength and the preservation of the social stability we have attained through centuries of clumsy effort is of vital importance. A nation's success depends upon the welfare of all its people.

THE PROFESSIONAL SERVICES OF HELEN KINNE

Miss Helen Kinne, Professor of Household Arts Education in Teachers College, Columbia University, died in New York, December 29, 1917. Miss Kinne was a pioneer worker and a recognized national leader in the development of home economics. Her teaching began in 1891, and during her years of work she has trained about 3000 teachers of home economics, who are now rendering service in all parts of the world. Born in Norwich, Connecticut, in 1861, and living afterward in Providence, Rhode Island, where she attended private schools and took advanced instruction under members of the faculty of Brown University, her attention was caught in 1890 by a magazine article that described the newly-established New York College for Training Teachers which was offering courses in "domestic economy." She entered this institution in January, 1891, and six months later was asked to become the instructor in domestic economy, which as a new subject was then under the direction of the Department of Physics and Chemistry.

In 1898, when Teachers College, by affiliation with Columbia, became the first university school of education, Miss Kinne was made Professor of Domestic Science and Art in charge of her separate department. The subject grew rapidly and after a time separate departments of Domestic Science and Domestic Art became necessary and Miss Kinne became head of the former and Mrs. Woolman of the latter. As the student body increased specialized teaching was developed, Miss Kinne finally taking as her personal responsibility the courses in methods of teaching, while retaining active supervision of the laboratory courses in food-chemistry and cookery. She also herself gave the course in household management and domestic economy. Separate departments of Household Administration, and of Nursing and Health, under Miss Nutting, had begun to develop when the gift of a $450,000 building made possible the organization of the School of Household Arts, in 1909, in which Miss Kinne became senior professor in the department of Household Arts Education, while departments of Household Chemistry, Physiological Chemistry, Nutrition, Foods and Cookery, Textiles and Clothing, each with extensive laboratories, and its own teaching staff, were developed on the foundation which she, herself, had laid.

The twenty-fifth anniversary of Miss Kinne's first connection with Teachers College was celebrated in January, 1916. The next year she went on her Sabbatical leave and at the end of it she was not in health

to return to her work. In November she came back to New York expecting to resume her duties in January, but an acute attack of colitis, from which she had long suffered, came on at Christmas and proved fatal five days later.

When the history of home economics is written Miss Kinne will be counted among the half-dozen national leaders who in the early development of this work won a place for it in the school curriculum, and by training competent teachers made that place secure. Her own department at Teachers College increased from a mere handful of students to over a thousand each year in regular and special courses. In the country at large the subject found a place in most of the woman's colleges except those of strictly academic character, in a large number of universities, and in nearly every public normal school and public school system. To this result Miss Kinne also contributed by leadership outside her institution. From the first Lake Placid Conference on Home Economics, in 1899, as chairman year after year of one of its committees on courses of study, she led a group who studied the educational aspects of the subject. After 1905, Miss Kinne was chairman of the "Teaching Section of the Lake Placid Conference on Home Economics" which held a winter educational meeting for the next few years, and which was one important step toward the organization of the American Home Economics Association in 1908. Miss Kinne's committee reports on such topics as Grade School Work, Vocational Schools, Secondary Schools, and Requirements for Teachers, appearing almost every year, were significant contributions toward the development of our subject.

The Home Economics Association of Greater New York was organized under Miss Kinne's leadership in the fall of 1908, and she served as president for three years. The programs dealing with health problems, standards of living, infant welfare, and other social as well as educational matters, reflected the widening views of those years.

In the American Home Economics Association Miss Kinne took a leading part, serving on the Council and as one of the incorporators of the Association, and on the editorial board of the JOURNAL. She was also chairman of its important committee on Legislation for a number of years, and was active in the earlier campaigns for what were eventually the Smith-Lever and the Smith-Hughes acts, which are doing so much to enlarge our professional fields at present.

Miss Kinne also worked professionally in other associations, contributing papers particularly in the Eastern Manual Training Association.

Another contribution to home economics was made in her books. Her "Equipment for Teaching Domestic Science," helped to improve and standardize the material means of instruction; her text-books, written with Miss Cooley as co-author, "Shelter and Clothing" (1913), and "Foods and Household Management" (1915), and the Home Making Series "Food and Health," "Clothing and Health" and the "Home and the Family" (1916–1917), have made her name well known to thousands of school girls now studying home economics. Her projected "Methods of Teaching Home Economics" was never written, but the thousands of teachers who received their training under her are living testimony of her skill and her ideals in this field.

Miss Kinne regarded home economics as a national and international agency for social progress. Because of the latter, she had planned to spend her Sabbatical year in helping to introduce home economics into missionary schools in China; she was to have lectured at the Canton Christian College, and an invitation had come for her to plan the home economics department of a new Missionary College in Japan.

She was returning to the College full of plans for her courses and for her participation again in the life of the College. She was planning to bring special lecturers on immigration and other problems to the College, and was keenly following the war situation as related to home economics, and was expecting to go to Washington and to Boston in quest of materials during the Christmas holidays when the fatal illness came on.

FOR THE HOMEMAKER

A LESSON IN ECONOMICAL BUYING

GRETA GRAY

Everyone knows that different foods vary in the amount of nourishment they give to the body, and that the value of a pound of food is by no means measured by its cost. Yet it is not always easy for housekeepers to judge which of two foods gives more energy to the body for the money expended. These tables are intended to help the housewife, the teacher, and the student find this out with little effort.

The calorie is a measure for energy (power to do work) just as the inch is a measure of length, or the pound is a measure of weight. To make a garment we need more yards of cloth 18 inches wide than we do of cloth 36 or 54 inches wide. To get enough energy to keep the heart pumping, to walk about, and to work, we need more pounds of a food which yields 200 calories per pound, than we do of a food which yields 1600 calories per pound. We buy cloth by the yard and food by the pound. We can calculate whether cloth which is a yard wide is cheaper or dearer at 30 cents a yard, than cloth 18 inches wide at 10 cents a yard, and how much of each we require. So we can calculate which of two foods is the cheaper for the energy it gives; but we find it more difficult to figure out which is the cheaper food, than which is the cheaper cloth. This table is meant to make it even easier to tell which of two foods is really the cheaper, so far as energy is concerned, than it is to calculate which of the two pieces of cloth is the cheaper.

It must always be remembered, though, that energy is only one factor, and that we might buy a great many calories of food very cheaply and still be very poorly fed. Milk, for instance, yields only 314 calories a pound, while sugar gives 1815. Yet milk is an indispensable food, while we could get along without sugar.

To make a perfectly fair comparison, we should know just what each food does in the body. If we do not forget this, we can get a great deal of help in buying foods to good advantage, by finding out how much energy we get for our money.

From a study of the tables that show their energy value, we find that we may make nine groups of most of the ordinary articles of food, according to the weights of each required to yield approximately the same number of calories. These nine groups will range from those of which we

TABLE I

Weights of Foods Furnishing 1600 calories

GROUP 1. ¼ POUND REQUIRED	GROUP 2. ½ POUND REQUIRED	GROUP 3. 1 POUND REQUIRED
Bacon	Cheese, American and Swiss	Grain products: Cereals, Flour, Starch
Butter	Cocoa	Dried fruits: Raisins, Figs, Dates
Chocolate	Crackers	Sugar
Nuts (shelled) except chestnuts	Side of pork	Dried legumes
Lard		Gelatin
Olive oil, etc.		Tapioca
Peanut butter		Macaroni
Suet		Cream, thick
Fat salt pork		Mutton flank
		Pork: Smoked ham, Smoked shoulder, Deviled ham, Sausage meat

GROUP 4. 1 TO 2 POUNDS REQUIRED	GROUP 5. 2 TO 3 POUNDS REQUIRED	GROUP 6. 3 TO 5 POUNDS REQUIRED
Bread	Beans, canned	Cheese, cottage
Dried fruits: Apples, Apricots, Prunes	Cream, common	Fish—most kinds. There is more refuse in fish as purchased than in cuts of meat
Meat, most cuts of average fatness and waste	Eggs	Milk, whole
Molasses	Fish, oily	Sweet potatoes
Olives	Fowl	Canned corn
Syrups	Meat, lean cuts or cuts with much waste	
	Milk, canned	

GROUP 7. 5 TO 10 POUNDS REQUIRED	GROUP 8. 10 TO 15 POUNDS REQUIRED	GROUP 9. 15 TO 25 POUNDS REQUIRED
Berries, most	Fish, shell (with shell)	Melons
Fruits, most	Vegetables (succulent): Asparagus, Cauliflower, Spinach, etc.	Rhubarb
Milk, skimmed		Vegetables (salad): Cabbage, Celery, Cucumber, Lettuce, Radishes, Tomato
Vegetables (starchy): Most root, Green peas, beans, etc., Canned peas, Corn		

must have ½ pound to yield 1600 calories to those of which we must have from 15 to 25 pounds, as shown.

We may put our foods into less well defined or larger groups, as the number of pounds necessary to yield 1600 calories increases, because a pound more or less means only a few calories more or less; because the amount of waste, in some foods, varies so much according to their condition and the way they are prepared; and because these bulky foods even when used in large quantities, furnish such a small part of the energy of our diet.

It will be noticed that this classification makes it easy to remember to which group most of our common foods belong and it is hoped it may serve to fix in mind the relative fuel values of these foods.

From this grouping we see that we need forty or fifty times as much of some foods as we do of others to give us the same amount of energy. The table (following) enables us to determine which of two foods gives more energy for less money.

To use the table to compare one food with another as to approximate cost of the energy furnished, find in the left hand column the group to which the first food belongs, and then look along the horizontal line until the column headed by the cost per pound of this food is found, on this line and in this column is the cost of this food for 1600 calories (the unit of energy for which this table is made). In the same way find the cost of 1600 calories of the second food. This gives us the figures for the comparison of the two.

For example: To determine by the table whether or not celery at 10 cents a pound is really cheaper as to energy supply than shelled nuts at 80 cents or a dollar a pound. Finding group 9 (to which celery belongs) in the left hand column and running along to the column headed 10 cents a pound, we see that 1600 calories of celery costs 2 dollars. In the same way we find from the table that 1600 calories of shelled nuts at 1 dollar a pound costs 50 cents. To get the same amount of energy from one as from the other we would have to have 2 dollars worth of celery, and 50 cents worth of nuts; so that celery at 10 cents a pound is four times as expensive as shelled nuts at 1 dollar a pound. Another consultation of the table shows us that rolled oats at 7 cents a pound furnishes as much energy as eggs at 30 cents a pound. (About 40 cents a dozen, or nine eggs to a pound).

This does not mean that we should always eat nuts instead of celery, or never have any of the more expensive foods. For several reasons we

need some vegetable or fruit at each meal; and we need a variety of food every day; and every one, children most of all, must have milk. It would be poor economy to do without these foods. It is hoped, however, that this table will aid the housewife to choose wisely and economically in selecting the food for her family, for a large part of the days food supply may be selected from the cheapest foods.

TABLE II

Comparative Cost of 1600 Calories of Different Foods at Varying Prices

COST PER POUND.....	$0.01	$0.02	$0.03	$0.04	$0.05	$0.06	$0.07	$0.08	$0.09	$0.10
Group 1. Cost for 1600 calories.....	$.005	$0.01	$0.015	$0.02	$0.025	$0.03	$0.035	$0.04	$0.045	$0.05
Group 2. Cost for 1600 calories.....	.0075	.015	.0225	.03	0.375	.045	.0525	.06	.0675	.075
Group 3. Cost for 1600 calories.....	.01	.02	.03	.04	.05	.06	.07	.08	.09	.10
Group 4. Cost for 1600 calories.....	.015	.03	.045	.06	.075	.09	.105	.12	.135	.15
Group 5. Cost for 1600 calories.....	.025	.05	.075	.10	.125	.15	.175	.20	.225	.25
Group 6. Cost for 1600 calories.....	.04	.08	.12	.16	.20	.24	.28	.32	.36	.40
Group 7. Cost for 1600 calories.....	.075	.15	.225	.30	.375	.45	.525	.60	.675	.75
Group 8. Cost for 1600 calories.....	.125	.25	.375	.50	.625	.75	.875	1.00	1.125	1.25
Group 9. Cost for 1600 calories.....	.20	.40	.60	.80	1.00	1.20	1.40	1.60	1.80	2.00

TABLE II (Continued)

COST PER POUND.....	$0.20	$0.30	$0.40	$0.50	$0.60	$0.70	$0.80	$0.90	$1.00
Group 1. Cost for 1600 calories..	$0.10	$0.15	$0.20	$0.25	$0.30	$0.35	$0.40	$0.45	$0.50
Group 2. Cost for 1600 calories..	.15	.225	.30	.375	.45	.525	.60	.675	.75
Group 3. Cost for 1600 calories..	.20	.30	.40	.50	.60	.70	.80	.90	1.00
Group 4. Cost for 1600 calories..	.30	.45	.60	.75	.90	1.05	1.20	1.35	1.50
Group 5. Cost for 1600 calories..	.50	.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50
Group 6. Cost for 1600 calories..	.80	1.20	1.60	2.00	2.40	2.80	3.20	3.60	4.00
Group 7. Cost for 1600 calories..	1.50	2.25	3.00	3.75	4.50	5.25	6.00	6.75	7.50
Group 8. Cost for 1600 calories..	2.50	3.75	5.00	6.25	7.50	8.75	10.00	11.25	12.50
Group 9. Cost for 1600 calories..	4.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00	20.00

To find the cost of 1600 calories of a food at 15 cents a pound add the cost of 1600 calories of that food at 10 cents a pound and the cost at 5 cents a pound. Do the same for any cost per pound that is not given above.

HOUSEHOLD THRIFT

C. F. STODDARD

Washington, D. C.

This is a story of thrift in the handling of a part of the family income—that portion which is given to the wife to meet the expenses of the table. Out of the $30 which my wife receives at the beginning of each month she feeds two people and manages to save an average of $8. The expenditure for food has been as high as $30 per month; it has been as low as $18; the average is $22. I shall not attempt to tell in detail how this money is spent, but merely suggest a few ways in which the resources are conserved. What she is doing almost any one can do who cares to make the effort. It means some inconvenience—watching for bargains in food, walking a little further for the sake of getting an article cheaper and then carrying it home one's self, buying without a telephone, canning one's own fruit and making jelly on hot summer days, and in other ways finding and stopping the household leaks.

There is in this city a chain of grocery stores which sell at a reduction of from $\frac{1}{2}$ cent to 3 or 4 cents the same provisions that may be purchased in other stores. They do not deliver. A large portion of our food is bought at one of these stores, and from a comparative record which I have kept I find that the average saving has been 80 cents per month. On some articles, including meats, there is no reduction and these are therefore purchased at the regular prices at a market not far from our home. Here a saving of 5 per cent is effected on all purchases by preserving the cash register receipts—not a large item, but sufficient to stop a leak which is usually disregarded.

It is more economical for us to can fruit and make jelly than to purchase them. For instance, even with sugar at $7\frac{1}{2}$ cents per pound (it was bought for $7\frac{1}{2}$ cents at one of the chain stores when it was 8 cents at all other stores), and including the cost of the jars and glasses, which of course should not be included every year, the fruit has averaged 15 cents a pint and the jelly $6\frac{1}{2}$ cents a glass. Not including the containers, the average has been approximately 11 cents and $4\frac{3}{4}$ cents, respectively. You can hardly get the very cheapest canned fruit and jellies at these prices. Even including the labor the cost is much less than that of a commercial product that would compare in quality.

It is impracticable to estimate the saving effected by the use of a

small oven which fits over the gas burner instead of using the large gas oven; by covering the ice with a chemically prepared cloth, which costs 13 cents, thus reducing the ice bill; by purchasing round steak at 28 cents, grinding it and making a meat loaf which lasts 3 or 4 meals, instead of buying sirloin at 30 cents or veal chops at 35 cents, as many do, and having only enough for one or at most two meals.

But the best part of this thrift program is the disposition of the $8, more or less, which has been saved out of the $30. One half of this amount is regularly deposited in a building and loan association which pays 6 per cent interest, and during the five years of our married life the balance has grown to more than $200. A portion of the other half was used to purchase a 5 per cent industrial bond (this was before the days of the Liberty Bond), while the balance is now drawing 4 per cent interest in a savings bank for use in an emergency such as sickness.

In this connection I might add that I have a dime bank into which I drop 10 cents every day I walk to and from the office (3½ miles each way), this amount being called our "Christmas fund" for the purchase of gifts. Last year this scheme yielded us $20. Also, at the end of each week every penny I find in my pockets goes into a tin box. In this way I accumulated about $3 last year, which was deposited in the savings account when I had saved an even dollar. Another way in which I have accumulated a small sum is by putting aside each year a number of pennies equal to my age. My father started this when I was born and I have continued it ever since I have been earning money, and expect to continue till death. At present the amount is approximately $7 and draws 6 per cent interest.

"A NASTY THING CALLED FAMINE"

"The food wanted by mankind does not exist. The word *shortage* is not strong enough for the situation. To put the matter bluntly, the whole world is up against a nasty thing, familiar to the people of India, called *famine*."

LORD RHONDDA,
British Food Controller.

THE WHEAT FLOUR ALLOWANCE

The Food Administration has ruled that the use of wheat must be limited to 1½ pounds a week for each person in order that the absolutely necessary amounts be sent abroad, and that in the individual household it makes no difference whether the wheatless days or meals be observed provided the total amount of wheat is not exceeded. Many housekeepers, in order to know how best to regulate their use of wheat products, want to know exactly how much they are serving.

The following statements give different ways of distributing the allowance as well as the amount of wheat that goes into the ordinary servings. From these one may determine how to use the wheat to best meet one's especial needs.

It should be remembered too that a great many people should use less wheat than is allowed, and a large number should go without it altogether. Five hundred of the most influential hotels in the country have agreed to serve no wheat till the next harvest. One county in Texas has promised to use no wheat. Every householder who can join in this "no wheat" movement is contributing just so much toward winning the war. Indeed it is difficult to understand how any one who knows how serious the situation really is can possibly do anything else than give up wheat entirely.

Group 1. For those using the full allowance in the form of 1¾ pounds of Victory bread, and ½ pound of flour in other forms.

Bread allowance. 1¾ pounds Victory Bread = 1 pound of wheat flour. This amount is equal to ¼ pound or four 1-ounce slices per day.

	ounces
Breakfast cereals. One ready-to-serve, or one to-be-cooked, 2 servings per week	2
Other wheat products. Macaroni or spaghetti, 1 serving per week	1
Crackers, (2 saltines), 1 serving per week	¼
Soups. Thickened cream soups, 2 servings per week	½
Sauces and gravies. Used once each day	1
Muffins. (50-50), or griddle cakes (2 as a serving = ½ ounce) 2 servings per week	1
Biscuits. (50-50) (2 as a serving = ½ ounce) 2 servings per week	1
Cake. (50-50) 3 servings per week	¾
Pie. (one crust 50-50) 2 servings per week	½
Total	8

Group 2. For those using total allowance in form of Victory Bread. 2¾ pounds Victory Bread = two 1-ounce slices per meal = 1½ pounds wheat flour.

No flour to be used for cooking or as macaroni, crackers, pastry, cakes, as wheat breakfast cereals, or to thicken soups, sauces, and gravies.

Group 3. For those who wish to serve by saving more than is asked. Wheatless days and meals observed literally, by making muffins, griddle cakes, and other hot breads with 100 per cent substitutes or by using potatoes, rice, and hominy instead of bread.

Bread allowance. (11 wheatless meals in week) 10 meals using two 1-ounce slices Victory Bread per meal = 20 ounces = 11½ ounces wheat flour.

Additional wheat products. Choose from the list, showing the wheat flour in average servings of foods, those which contain the smaller amounts of wheat flour. Omit entirely such products as wheat breakfast cereals which are extravagant in their use of wheat.

AMOUNT OF WHEAT FLOUR IN AVERAGE SERVINGS

	Wheat Flour ounces
Breakfast Cereals	
Ready-to-serve	
Rolled flakes—1½ cup—2 servings	1
Shredded wheat biscuit (1)	1
Granular (e.g., grapenuts) ¼ cup	1
To-be-cooked	
Rolled flakes, ½ cup cooked, ⅓ cup uncooked	1
Granular (e.g. cream of wheat, farina, etc.), ½ cup cooked, ¼ cup uncooked	1
Macaroni or spaghetti, ½ cup cooked, ¼ cup uncooked	1
Noodles, 1 tablespoon	⅛
Bread, 1 ounce slice (3 x 3 x ½)	½
Crackers, (all wheat) 2 saltines	¼
Biscuit, (50-50 rule) one medium biscuit (6 from 1 cup flour)	¾
Muffins, (50-50 rule) one muffin, (6 from 1 cup flour)	¼
Cake, (50-50 rule) one medium serving (24 servings from 3 cups flour recipe)	¼
Pie, one crust, (50-50 rule) one serving (6 servings from ¾ cup)	¼
Soups and stews, (e.g., thickened cream soups) soups, 1 cup serving, 1 tablespoon flour	¼
Sauces, (in creamed and scalloped vegetables, gravies, croquettes, etc.). ¼ cup serving ½ tablespoon flour	⅛

UNTIL THE NEXT HARVEST

USE WHEATLESS BREADS AND CAKES

From the Experimental Kitchen, Home Conservation Division, United States Food Administration

WHEATLESS SPONGE CAKES

Barley Sponge Cake

4 eggs
1 tablespoon lemon juice
½ teaspoon salt
1 cup sugar
1½ cups barley flour

Corn (Flour) Sponge Cake

4 eggs
2 tablespoons lemon juice
½ teaspoon salt
1 cup sugar
1 cup corn flour

Oat Sponge Cake

4 eggs
1 tablespoonful lemon juice
½ teaspoon salt
1 cup sugar
½ cup oat flour
½ cup corn flour

Rice Sponge Cake

4 eggs
2 tablespoons lemon juice
½ teaspoon salt
1 cup sugar
¾ cup rice flour

Directions: Beat the yolks of the eggs till thick and lemon colored; add the sugar gradually, with the salt and lemon juice and beat thoroughly. Then add the stiffly beaten whites and the sifted flour and fold them in lightly. Bake in an ungreased pan for thirty-five to forty minutes in a moderate oven (365° F.). The temperature may be raised slightly during the last half of the baking (to 400° F.).

These cakes follow the old-fashioned rule of "the weight of the eggs in sugar and half their weight in flour" (pastry flour). They have been made over and over again and have received the approval of a large number of people. They are all very nice and light, with texture and color good. The barley has its characteristic flavor. The corn cake is especially tender. The extra lemon juice used with the rice and corn covers up the starchy taste so often found with these flours.

In place of the oat flour, rolled oats run through a food chopper may be used. This may be sifted if a fine flour is desired.

BAKING POWDER LOAF BREADS

Barley and Oat Bread

1 cup liquid
4 tablespoons fat
4 tablespoons syrup
2 eggs
6 teaspoons baking powder
1 teaspoon salt
2 cups (5 ounces) barley flour
1 cup (5 ounces) ground rolled oats

Directions: Mix the melted fat, liquid, sirup, and egg. Combine the liquid and well mixed dry ingredients. Bake as a loaf in a moderately hot oven (400° F. or 205°C.) for one hour or until thoroughly baked.

Nuts, raisins or dates may be added if desired. The loaf should not stand after mixing.

OTHER COMBINATIONS

One and one-third cups (5 ounces) of corn flour may be used in place of the barley flour, giving an Oat and Corn Flour Bread. Since this is a little dry, it is much improved by the addition of raisins or raisins and nuts. Corn Flour and Buckwheat Bread may be made by using 1⅓ cups (5 ounces) of corn flour and one cup (5 ounces) of buckwheat flour.

COMPARATIVE WEIGHTS AND MEASURES

Reprinted from the March JOURNAL *with corrections*

	WEIGHT IN GRAMS	APPROXIMATE NUMBER OF OUNCES
1 cup white bread flour	113	4
1 cup pastry flour	100	3½
1 cup barley flour	76	3
1 cup buckwheat flour	11	5
1 cup corn flour	109	4
1 cup rice flour	131	5
1 cup cornmeal fine	114	4
1 cup cornmeal coarse	130	5
1 cup rolled oats	75	3
1 cup fine granulated oats or 1 cup ground rolled oats run through food chopper	136	5

The new flours and meals are not yet standardized and they vary so greatly in character that it is difficult to establish an exact relation between their measure and weight. As has been said before, in cakes, muffins, and baking powder mixtures, repeated experiments have shown that they can be substituted successfully for equal weights of white flour. Combinations of different flours seem for some reason often to be more satisfactory than the use of one flour.

EDITORIAL

Home Service Work of the Red Cross. The following resolution was passed at the meeting of the Association in Atlantic City:

The American Home Economics Association in convention assembled wishes to extend to Mr. Persons of the American Red Cross its appreciation of his contribution to the program and its desire to coöperate in the important work of Home Service in the Department of Civilian Relief; therefore be it

Resolved, That the President be authorized to appoint a committee to draft a statement to be sent to our members after consultation with Mr. Persons urging their local coöperation with the Home Service work.

In accordance with this resolution this call to service has been formulated:

AN APPEAL TO EVERY HOME ECONOMICS WORKER

As a home economics worker you are urged to offer your services to your local Red Cross organization in connection with its Home Service work as well as in connection with its teaching work and its supply service.

The Home Service Sections have been organized in many chapters as a means of carrying on the Red Cross duty of adequately caring for the families of men in the service. With the increase in the numbers of these men in service will come an increasing need for Home Service work, and new Home Service Workers are being constantly enlisted and trained.

Many of the families of the soldiers and sailors need advice and help of the kind which home economics workers are especially well qualified to give, such as advice concerning better food habits, better household management, better budget planning, better clothing standards. Also many of the Home Service Workers need special home economics training in order to help them to advise families more wisely.

Training classes for Home Service Workers are being held by many of the Red Cross Chapters, and Home Service Institutes are being held in certain cities for the training of specially qualified leaders from various chapters so that they may better take charge of local Home Service Work.

In the recommended course for both the training class and the Institute, it is planned to devote two hours to the discussion of budget planning and dietary supervision. If such courses are being given locally, you have a definite means of service in connection with this instruction to volunteer visitors in certain phases of home economics. In addition your service can well be utilized by Home Service Workers for consultation purposes and for the preparation of special suggestions to be given by the Home Service Worker to families under her care.

If you have time, much service can probably be rendered if you will plan with your Home Service Section to visit one or more families regularly each week and try to be a good friend to them as well as helping them to a higher living standard. Such work involves special social training in addition to home economics training. This may be secured in one of the Home Service courses, or much may be learned from the following bulletins: "This Side of the Trenches with the American Red Cross;" "Home Service;" "Home Service Manual." These may be secured free of charge from your local Red Cross Chapter or by application to the Department of Civilian Relief, American Red Cross, Washington, D. C. Here also may be secured further information concerning opportunities for Home Service work.

CATHARINE J. MACKAY.

THE ELLEN H. RICHARDS FELLOWSHIP IN HOME ECONOMICS

The Richards' Fund Trustees have renewed for 1918–19 the coöperative arrangement with the University of Chicago for the maintenance of a fellowship in memory of Mrs. Richards, with a value of $500.00, and in addition tuition in the University.

Applicants must hold the bachelor's degree and be equipped to undertake graduate study. Application must be made before June 15 to the Office of the Graduate Schools, University of Chicago.

This is an unusual opportunity for one who wishes to do advanced work in household administration or some subject related to home economics.

Miss Minna Denton, formerly instructor at Lewis Institute and at Ohio State University, has held the fellowship during this year, working on her thesis for her doctor of philosophy degree.

BOOKS AND LITERATURE

Any book or periodical mentioned in this department may be obtained through the JOURNAL OF HOME ECONOMICS if the Journal price is listed.

Household Management. (Social Work Series). By FLORENCE NESBITT. New York: Russell Sage Foundation, 1918, pp. 169. $0.75. By mail of the Journal, $0.80.

This little book which has just come out in the Social Work Series, published by the Russell Sage Foundation, edited by Miss Mary E. Richmond, is invaluable in the present war emergency. It outlines methods for the home visitor who seeks to improve the standards of living by first-hand contact with individual families. After the introductory chapter it discusses in turn the following topics: Problems of the Visitor to the Home; Aids to Health and Household Management; Dietary Standards; Choice of Foods; Purchase, Preparation, and Serving; Housing and Homemaking. In the appendix are given suggestions for a talk on Milk; Special Diet Lists, and Average Weights and Heights of Normal Children.

The author, Miss Nesbitt, has a unique experience in this field as a member of the staff of the United Charities of Chicago and later of the Mothers' Pension Department of the Chicago Juvenile Court, in which connections she was personally dealing at first-hand with hundreds of families needing aid in raising their standards of living. She is at present Director of the Food Conservation Section of the Cleveland Council of National Defense.

The book is most timely as it gives a practical treatment of the problems which food conservation workers are everywhere facing. It will be of particular help to the Home Service workers of the local Chapters of the Red Cross. Home economics workers are now being urged as a part of their loca service to attach themselves to the local Red Cross Chapter in its work with soldiers' families. This book will promote such co-operation in a successful way. It should also prove helpful to home economics teachers in cities as a means of giving them information concerning the living standards in families from which their pupils come.

B. R. ANDREWS.

A History of Ornament, Ancient and Medieval. By A. D. F. HAMLIN. New York: The Century Company, 1916, pp. 406. $3.00.

At the present time, when so much emphasis is being placed upon the primitive designs of America, household art teachers are interested in this book by Professor Hamlin. In the introduction the author points out that "in this volume attention is directed to the origin and development of the historic styles of ornament, all the various motives, kinds, and types of ornament of each country and period being considered in discussing the style of that time and region." He has covered the subject very systematically and completely. The first chapter is devoted to primitive and savage ornament followed by chapters on Egyptian, Chaldean, Assyrian, Pre-Hellenic Greek, Etruscan, Roman, Pompeiian, Early Christian, Byzantine, Romanesque, and Gothic. Under the various developments the author has discussed the people and enough of the history to make the setting clear; the general characteristics of that particular style of decoration; the various motives used and the origin and development of each.

The descriptions and illustrations are not confined to architecture but cover all the

applications peculiar to the period. The Gothic includes wood carving, metal work, textiles, tiles, manuscripts, and stained glass windows but with the emphasis upon architectural decoration.

The book is completely indexed with a list of some 400 illustrations. The illustrations are conveniently arranged for use as reference material.

MABEL RUSSELL,
Household Arts Instructor,
Iowa State College.

A Manual of Household Accounts. Including Complete Instructions, Illustrative Figures, and Forms for Actual Use Covering Three Years. By J. CHESTER CRANDELL, C.P.A. and MERCY FRYE CRANDELL. Boston: Whitcomb and Barrows. 1917. pp. 24. + account forms. $2.00. By mail of the Journal, $2.15.

This book is a real contribution to the literature of household accounts as it provides a method of putting the financial record of a family into complete accounting form, which makes it possible to summarize one's financial situation, "as to cash receipts and payments, as to income and to expenditure," and also as to a balance sheet showing "assets and liabilities." These summaries are the end point in all business bookkeeping, but so far, in the account books on the market, household accounting has been almost exclusively a record of money received and spent currently, and the summaries provided have simply been monthly and annual recapitulations of cash actually received and spent.

It is quite another matter to bring into the household financial record such changes in value as depreciation, wear and tear, and to take account of accrued income which has not yet been received, and of current debts which have not yet been paid, and of advance payments which have been made during the present period of time but which in reality cover expenditures following in the future periods, as is the case, for example, with fire insurance which is generally paid in three-year periods in advance.

As to household accounts, in their relation to property values, like real estate, and to standing debts, like mortgages, they have never brought in such accounts except in cumbersome ledger and journal method. The Crandell Manual presents all this in a remarkably simple and intelligible form. One is encouraged to keep one's cash records of receipts and payments by whatever method one has used in the past, but one transfers the summaries of such cash records at the end of the month to the Crandell Manual where they become part of a systematic accounting record.

The Crandell book provides blanks for three years' accounts, so that it is a permanent household record of much value.

It should prove very useful as a text book in household accounting courses, in presenting briefly a view of bookkeeping science applied completely to the household—providing for records of all income and expenses, whether in the form of cash, credit, or of changing values, and also of all resources and liabilities of the household partnership.

Every college department of home economics should give a thorough course in household accounts, which should give a complete view of bookkeeping applied to the home as well as of simple cash records of various types. This text will greatly help in such a course.

B. R. ANDREWS,
Teachers College, New York City.

BOOKS RECEIVED

The Belgian Cook-Book. Edited by Mrs. Brian Luck. New York: E. P. Dutton and Company, 1915, pp. 151. $1.00.

Fifty Liberty Recipes. Compiled by Amelia Doddridge. Indianapolis: W. K. Stewart Company, 1917, pp. 22. $.35.

Food: Fuel for the Human Engine. Eugene Lyman Fisk, M.D. New York: Funk and Wagnalls Company, 1917, pp. 77. Paper, $.75.

Furniture of the Olden Time. Frances Clary Morse. New York: The Macmillan Co., 1917, pp. 470. $6.00.

Health First. Henry Dwight Chapin, M.D. New York: The Century Company, 1917, pp. 221. $1.50.

The High School Cookery Book. Grace Bradshaw. London: Longmans, Green and Company, 1916, pp. 266. $.90.

Historic Silver of the Colonies and its Makers. Francis Hill Bigelow. New York: The Macmillan Company, 1917, pp. 444. $6.00.

Industrial Arithmetic for Girls. Nelson L. Roray. Philadelphia: P. Blakiston's Son and Company, 1917, pp. 196. $.75.

Manual of Milk Products. William A. Stocking. New York: The Macmillan Company, 1917, pp. 578. $2.00.

A Manual of Personal Hygiene. George D. Bussey. Boston: Ginn and Company, 1917, pp. 156. $.60.

Modern Dietetics. Lulu Graves. St. Louis: Modern Hospital Publishing Company, 1917, pp. 226. $2.00.

Official Recipe Book. Chicago: The Illinois State Council of Defense, 120 W. Adams Street, 1917, pp. 72. Paper $.10.

The Starvation Treatment of Diabetes. Lewis Webb Hill, M.D. and Rena S. Eckman. Boston: W. M. Leonard, 1917, pp. 133. $1.25.

War Nursing. A Text-book for Auxiliary Nurses. Minnie Goodnow, R.N. Philadelphia: W. B. Saunders Company, 1917, pp. 172. $1.50.

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Food Conservation and the Servant Problem. Florence Clarke, *Amer. Cookery*, Jan. 1918.

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Butter and Fat. *Country Life*, Dec. 1917.

Canning a Way to Market. Randall Howard, *The Country Gentleman*, Jan. 5, 1918.

Sugar Beet Supremacy. George Frederic Stratte, *The Country Gentleman*, Jan. 5, 1918.

Wanted: A Program for Food Production. E. Davenport, *The Country Gentleman*, Jan. 26, 1918.

Corn to the Rescue. Harvey W. Wiley, *Good Housekeeping*, January, 1918.
Patriotism Calls for Corn Bread. Caroline B. King, *Good Housekeeping*, Jan. 1918.
Milk. Harvey W. Wiley, *Good Housekeeping*, Feb. 1918.
War Bread. Irene Weed, *The House Beautiful*, January, 1918.

Nutrition

The New Dietetics in Acute Illness. Lilian Brewster, *Nat. Food Magazine*, Jan. 1918.
The Elementary Terms of Nutrition. J. P. Street, *Mod. Hosp.*, Jan. 1918.

Miscellaneous

Mobilizing the Women. Ida Tarbell, *Harpers*, Nov. 1917.

War Work of College Women in the West. T. D. A. Cockerell, *School and Society*, Dec. 15, 1917.

The War and the Schools. *Indus. Arts Magazine*, Oct., Nov., Dec. 1917, and Jan. 1918.

Problems of Social Relief in Russia. C.-E. A. Winslow, *Survey*, Dec. 1, 1917.

Mothers and Night Work. Mary McDowell, *Survey*, Dec. 22, 1917.

Girls and Khaki. Some Practical Measures of Protection for Young Women in Time of War. *Survey*, Dec. 1, 1917.

Mothered by the City. An Appraisal of the Child-placing Work of the New York Children's Home Bureau. Winthrop D. Lane, *Survey*, Jan. 19, 1918.

The Housing of War Workers. Bruno Lasker, *Survey*, Jan. 5, 1918.

Gretchen of Hildesheim. The American Playground as an Antidote to German Militarism. C. M. Goethe, *Survey*, Jan. 5, 1918.

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The Standardization of the Work and Training of the Dietitian. Rena S. Eckman, *Mod. Hosp.*, Jan. 1918.

Vocational Guidance Through the Life Career Class. J. M. Brewer, *School and Society*, Nov. 1917.

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The Fireplaces of Yesterday and Today. Mary H. Northend, *Amer. Cookery*, Jan. 1918.

Attractive Bungalows. Charles Alma Byers, *Mothers Magazine*, Feb. 1918.

The Modern School Dress as an Eighth-Grade Problem. Edna J. Benson, *Indus. Arts Magazine*, Feb. 1918.

Analytic Textile Weaving (for grades I–IV). S. E. E. Hammond, *Indus. Arts Magazine*, Feb. 1918.

Efficiency in the Kitchen. Winnifred S. Fales, *Mothers Magazine*, Feb. 1918.

The Cult of Tea. Churchill Ripley, *Mothers Magazine*, Feb. 1918.

Managing Your Week's Work. Helen Bennett, *Pictorial Review*, Feb. 1918.

NEWS FROM THE FIELD

Farmers' Week at Ohio State University, January 28 - February 1, proved successful notwithstanding the congested transportation, the intense cold weather, and shortage of labor on the farms.

The meeting was opened with an address of welcome by President Thompson in joint session with the men. Interest centered on the problems which have arisen out of the present world war. It was a war week. Opportunity was afforded those in attendance to learn what the women of Ohio can do and are doing to help win the war. Emphasis was placed upon the necessity of the organization and coöperation of all the orces in each community. It was urged that women coöperate with the organization in existence and thus avoid duplication of effort.

The main subjects presented in the meetings were production, conservation, thrift, the Red Cross, and child welfare. Conservation of food and clothing were presented by lecture, demonstration, and exhibit. An exhibit entitled "The road to food conservation" showed six weeks menus in which were eighteen wheatless, fourteen meatless, seventeen fryless, and twenty-one pieless meals. Child welfare posters were displayed; infants, small children's and school children's clothes illustrated, and new clothes from old were shown at various stages of progress.

Red Cross work was presented through an exhibit of surgical dressings, hospital garments, and knitting. Dr. Hagerty, head of the Department of Economics and Sociology who has been called from the University to Red Cross service told of the work of the Red Cross in its dual activities, i.e., military and civilian relief.

Exhibits of available literature on timely subjects, and pictures and picture hanging also formed a part of the program for the week.

In the last hour of the session President Thompson reviewed the present situation of our country and the world in which the war has developed a new condition which is more closely related to the food situation than we had believed possible. He also recalled the part which the women of the countries have taken in this crisis and must continue to take, especially in the conservation of the world's goods.

Throughout the week splendid interest was manifested in the ways and means of rendering the greatest service to our people and allies.

The Connecticut Home Economics Association met at the Hartford High School on Saturday, February 16, in connection with the regular meeting of the Connecticut State Teachers Association, with the President, Mrs. Edith Hatch Brown, of Boston, in charge.

Mr. E. G. Routzahn, of the Russell Sage Foundation, and Mr. Guy C. Smith, of the Bureau of Markets, gave addresses.

Mr. Robert Scoville, Federal Food Administrator, spoke on Food Conservation in Connecticut, and Mrs. Mary Schenck Woolman on clothing. The remainder of the afternoon was given over to the following sectional meetings:

Teachers Section, Chairman, Miss Catherine B. Case; Home Section, Chairman, Miss Annie I. Robertson; Institutional Management, Chairman, Miss Orissa M. Baxter; Social Workers, Chairman, Miss Sara Holbrook.

An exhibit illustrated the uses of meat, fat, sugar, and wheat substitutes, and restored dried foods.

Every woman interested in the great and

vital problem of "The Home" was welcomed at the meeting.

PROGRAM

Teachers' Section. Mr. Guy C. Smith, Field Agent in Marketing, Connecticut Agriculture College; Coöperation of Domestic Science Teachers with the Extension Work, Miss M. E. Sprague, Connecticut Home Economics Director; How to Correlate the Art and Sewing Departments, Miss Iva Abby, Hartford; Sewing in the Grammar Schools, Miss Florence Chapin, Hartford; Vocational Cookery, Miss Mabel Gessner, New Haven; How the Lunch Counter Pays Its Way, Miss Margaret Robinson, Meriden. Visit to Hartford High School Cooking and Sewing rooms where Mrs. Juanita M. Dean and Miss Annie I. Robertson explained the High School Courses and the method of carrying on the Red Cross work in the school.

Homemakers' Section. Two papers were: The Place of the Home Economics Teacher in the Community, Miss M. E. Sprague, Chairman State Home Economics Association; The Homemaker's Place in the Home Economics Association, Mrs. E. H. Brown, President Connecticut Home Economics Association.

The Annual Session of the Alabama Home Economics Association was held at the Alabama Girls Technical Institute at Montevallo, Alabama, on the first and second days of February. Among the speakers were Miss Anna Richardson, Field Agent for Home Economics of the Federal Board for Vocational Education; Mr. R. E. Tidwell, Director of Institutes for the State Department of Education; and Mr. R. H. Mangum, Director of Public Information of the United States Food Administration for Alabama.

American Home Economics Association. The officers elected at the Atlantic City Meeting are: President, Catharine J. MacKay; Vice President, Isabel Bevier; Secretary, Cora Winchell; Treasurer, H. Gale Turpin.

Notes. As a part of the general food conservation program the students of the department of home economics of the University of Montana prepared for display in a downtown window in Missoula samples of good things to eat made with substitutes for sugar. Displays were made of substitutes for wheat, for fats, and for meat. The faculty of the department is in charge.

The Department of Home Economics of the State University of Montana is now requiring that its students take a course in news writing given under the auspices of the Montana School of Journalism.

Mrs. Ann Gilchrist Strong was granted a year's leave of absence by the University of Cincinnati, and in September she sailed for India. Here she is studying food conditions and planning to introduce work in home economics in the schools and to inaugurate modern methods in the palaces and institutions. She is working under the Minister of Education.

Miss Mary F. Rausch, assistant professor of home economics in the extension division at the University of Washington, died at the Seattle General Hospital, February 21.

Miss Rausch went to the University of Washington in the fall of 1914. Through lectures, demonstrations, and printed material she has been able to reach thousands of women throughout the state in the interest of efficient home management. Miss Rausch studied at the Iowa State College and became the head of the home economics department in the State Agricultural College of Colorado. She left Colorado on account of her health and traveled for several years in Europe, studying methods of household management. Upon returning to America she took charge of the home economics department of the high school in New Rochelle, N. Y., and from there accepted the appointment at the University of Washington.